UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,251	04/14/2004	Ian R. Ollmann	APL1P301/P3248	8088

62464   7590   09/03/2009
BEYER LAW GROUP LLP/APPLE INC.
P.O. BOX 1687
CUPERTINO, CA 95015-1687

EXAMINER
TAN, ALVIN H

ART UNIT	PAPER NUMBER
2173	

NOTIFICATION DATE	DELIVERY MODE
09/03/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTOmail@beyerlaw.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2009*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-38* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   This Office action is responsive to the Request for Continued Examination (RCE) filed under 37 CFR §1.53(d) for the instant application on 5/4/09. Applicants have properly set forth the RCE, which has been entered into the application, and an examination on the merits follows herewith.

Claims 1 and 4-38 have been examined and rejected. This Office action is responsive to the amendment filed on 6/5/09, which has been entered in the above identified application.

Claim Objections

2.   Claims 1, 4-34, and 38 are objected to because of the following informalities:

a.   On *[line 27]* of claim 1, Examiner suggests changing "it respective row" to --its respective row--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4.   Claims 1, 4-34, and 38 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application

was filed, had possession of the claimed invention. Claim 1 recites "wherein the plurality

of horizontal segments are displayed at least partially based on <u>one or more granulate</u>

<u>objects respectively representative of one or more rows</u> of the displayed content" *[lines*

23-25 of claim 1]. It is not clear whether the term "respectively" is made in reference to

the one or more granulate objects corresponding to each of the plurality of horizontal

segments, or in reference to the one or more granulate objects corresponding to the

one or more rows. Interpreting the limitation the first way allows for one granule object

to be representative of more than one row, which has no support in Applicant's

specification. Applicant's specification only discloses "Each row is represented by a

granule object" *[page 11, lines 22-23 of Applicant's specification]*.

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.   Claims 1, 4-34, and 38 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

a.   Claim 1 recites the limitation, "wherein the plurality of horizontal segments are displayed at least partially based on <u>one or more granulate objects respectively representative of one or more rows</u> of the displayed content" *[lines 23-25 of claim 1]*. It is not clear whether the term "respectively" is made in reference to the one or more granulate objects corresponding to each of the plurality of horizontal segments, or in reference to the one or more granulate objects corresponding to the one or more rows.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1, 4-23, 26-29, and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham (U.S. Patent No. 7,228,492 B1), herein after Graham '492, in view of Graham et al (U.S. Patent No. 7,495,795 B2), herein after Graham '795.

Claims 1, 4-23, 26-29, 38 (Method)

Claim 35 (Computer Readable Medium)

Claim 36 (Apparatus)

Claim 37 (System)

8-1.   Regarding claims 1, 35, 36, and 37, Graham '492 teaches the claim comprising

obtaining one or more location criteria to identify a plurality of desired locations in the

file, by disclosing accepting user input indicating a user's specified concepts of interest

[Graham '492, column 2, lines 8-10].

Graham '492 teaches identifying one or more display criteria to be used to

designate the plurality of desired locations in a file to display their relative importance

with respect to each other, by disclosing displaying a graphical representation of the

presence of one or more concepts of interest to the user *[Graham '492, column 2, lines*

25-27]. Annotations may also be added to the document text to denote relevance to

user-selected concepts of interest *[Graham '492, column 7, lines 21-23]*.

Graham '492 teaches locating the plurality of desired locations in the file

according to the one or more location criteria, by disclosing analyzing an electronically

stored document to identify locations of discussion of the user-specified concept of

interest *[Graham '492, column 2, lines 10-13]*.

Graham '492 teaches determining relative importance of each one of the plurality

of desired locations in the file with respect to each other, by disclosing that techniques

for determining locations of concepts of interest can be used such as keyword counting

and Bayesian analysis *[Graham '492, column 2, lines 13-19]*.

Graham '492 teaches displaying a vertical scroll bar, with at least a portion of

content of the file and in proximity of an edge of the displayed portion of the content,

wherein the vertical scroll bar is operable to scroll the file and indicate the relative size

of the displayed portion of the content with respect to the size of the entire document, by

disclosing scroll bar 704 *[Graham '492, column 8, lines 22-24; figure 7A]*. Additionally,

[Graham '492, figures 7A-D] show a thumbnail image of the document on the left-hand

side of user interface 701 with a window corresponding to the location within the

document. Graham '492 teaches wherein the displaying of the vertical scroll bar

displays the vertical scroll bar, based on the relative importance, by applying the one or

more display criteria to each one of a plurality of corresponding locations of the scroll

bar corresponding to the plurality of desired locations in the file individually, wherein

said displaying of the scroll bar displays each one of the plurality of corresponding

locations of the scroll bar to indicate the relative importance of content in each one of

the plurality of desired locations in the file with respect to one another even though the

content of the plurality of desired locations of the file are not displayed, by disclosing

displaying an annotation contour 520 along an elongated thumbnail image 514 of the

document *[Graham '492, column 7, lines 7-11; figure 5]*. The annotation contour 514

including a sliding window 524 may be considered a scroll bar since sliding window 524

corresponds to the current location of text displayed in section 502 and because the

sliding window may be repositioned by the user *[Graham '492, column 6, line 65 to

column 7, line 15]*. Although *[Graham '492, figure 5]* depicts the annotation contour on a

horizontal scroll bar, *[Graham '492, column 9, line 60 to column 10, line 3]* clearly states

that the visual indicator (i.e. the annotation contour) may be displayed on either axis.

This, taken in conjunction with *[Graham '492, figures 7A-D]* which shows a thumbnail

representation of the document displayed vertically, suggests that one could easily

depict the annotation contour along the vertically displayed thumbnail image of *[Graham*

'492, figures 7A-D]. In fact, one would only need to switch the x and y coordinates of the annotation contour displayed in *[Graham '492, figure 5]* in order to do so.

Graham '492 teaches a plurality of horizontal segments, each of the horizontal segments indicating relative importance of contents in the corresponding locations of the file, by disclosing that the annotation contour may comprise a line graph, bar chart, scatter plots and the like *[Graham '492, column 4, lines 24-32]*. If the annotation contour of *[Graham '492, figure 5]* were displayed vertically using a bar chart, horizontal segments would indicate the relative importance of the contents.

Graham '492 does not expressly teach wherein the plurality of horizontal segments are displayed at least partially based on one or more granulate objects respectively representative of one or more rows of the displayed content, and wherein each granulate object stores at least: (a) a reference count indicative of the relative importance of its respective row and (b) text of its respective row. Graham '795 discloses displaying a scrollable thumbnail image of text representative of a current view of the text *[Graham '795, column 11, lines 18-36; column 12, lines 22-43; figure 3]*. The text information comprises a collection of lines with each line comprising one or more words *[Graham '795, column 28, lines 12-30]*. A data structure comprising a linked list of line objects is used to store the text information where each line object comprises a linked list of words contained in the line *[Graham '795, column 28, lines 34-40]*. This allows textual analysis to be performed on each line to calculate the frequency of individual words *[Graham '795, column 37, lines 1-13]*. Users may search the text for words *[Graham '795, column 18, line 57 to column 19, line 12]*. Ranges may be created

and displayed based on the searched word *[Graham '795, column 44, line 20 to column 45, line 5]*. Since users may specify and edit ranges *[Graham '795, column 42, lines 38-60]*, each range may correspond to a row of text. Ranges in a set of ranges may be ranked or sorted according to a user-configurable criteria such as relevance based on hits *[Graham '795, column 58, lines 19-27]*. Since Graham '492 discloses displaying relevancy of textual lines within a document, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the relevancy and text of each row, as taught by Graham '795. This would provide more detailed information concerning each row and thus, would allow users to more easily identify important sections of text within a document.

8-2.   Regarding claim 4, Graham '492 and Graham '795 teach the claim with respect to claim 1, wherein each of the plurality of horizontal segments is displayed with at least one of a color, hue, intensity, and transparency indicating its relative importance, because the annotation contour of Graham must have some sort of color. Additionally, Graham '795 discloses using different colors to indicate degree of relevance *[Graham '795, column 58, lines 11-14]*.

8-3.   Regarding claim 5 and 6, Graham '492 and Graham '795 teach the claim with respect to claim 1, wherein displaying the scroll bar further comprises applying a background display criteria to a plurality of locations of the scroll bar corresponding to remaining locations in the file that do not include the desire locations and displaying one

or more of the plurality of locations in the file by applying the display criteria and the

background display criteria, by disclosing displaying the annotation contour

corresponding to concepts of interest in a document *[Graham '492, column 4, lines 14-*

18]. Thus, parts of the document where there are no concepts of interest will not have a

contour and just have a background color.

8-4.   Regarding claim 7, Graham '492 and Graham '795 teach the claim with respect

to claim 6, wherein the plurality of desired locations of the file are a plurality of rows in

the file, by disclosing that the annotation contour represents locations with the

document *[Graham '492, column 4, lines 32-43]*.

8-5.   Regarding claim 8, Graham '492 and Graham '795 teach the claim with respect

to claim 1, further comprising displaying one or more of the plurality of locations in the

file by applying the display criteria, by disclosing that the annotation contour represents

locations with the document *[Graham '492, column 4, lines 32-43]*.

8-6.   Regarding claim 9, Graham '492 and Graham '795 teach the claim with respect

to claim 8, wherein the plurality of locations are a plurality of rows in the file, by

disclosing that the annotation contour represents locations with the document *[Graham*

'492, column 4, lines 32-43].

8-7.   Regarding claim 10, Graham '492 and Graham '795 teach the claim with respect to claim 1, further comprising displaying contents of the file by applying the display criteria, by disclosing that annotations are added to the document text to denote relevance to user-selected concepts of interest *[Graham '492, column 7, lines 21-23]*.

8-8.   Regarding claim 11, Graham '492 and Graham '795 teach the claim with respect to claim 1, wherein the location criteria is used to identify one or more errors, by disclosing receiving user input indicating user-specified concepts of interest *[Graham '492, column 7, lines 33-34]*. Thus, the user may submit any term or phrase such as "error".

8-9.   Regarding claim 12, Graham '492 and Graham '795 teach the claim with respect to claim 1, wherein the location criteria is used to identify one or more warnings, by disclosing receiving user input indicating user-specified concepts of interest *[Graham '492, column 7, lines 33-34]*. Thus, the user may submit any term or phrase such as "warning".

8-10.   Regarding claim 13, Graham '492 and Graham '795 teach the claim with respect to claim 1, further comprising obtaining one or more user-defined location criteria, by disclosing receiving user input indicating user-specified concepts of interest *[Graham '492, column 7, lines 33-34]*.

8-11. Regarding claim 14, Graham '492 and Graham '795 teach the claim with respect to claim 13, further comprising obtaining one or more user-defined display criteria, by disclosing a sensitivity control that allows the user to select the degree of sensitivity to apply in identifying potential locations of relevant discussion *[Graham '492, column 6, lines 50-64]*.

8-12. Regarding claim 15, Graham '492 and Graham '795 teach the claim with respect to claim 1, wherein the location criteria includes one or more rankings associated with one or more content-dependent criteria, by disclosing *[Graham '492, figure 5]*.

8-13. Regarding claim 16, Graham '492 and Graham '795 teach the claim with respect to claim 1, wherein each of the one or more display criteria includes at least one of color, hue, intensity, and transparency, by disclosing *[Graham '492, figure 5, "530b"]*.

8-14. Regarding claim 17, Graham '492 and Graham '795 teach the claim with respect to claim 16, further comprising obtaining one or more user-defined display criteria, by disclosing receiving user input indicating user-specified concepts of interest *[Graham '492, column 7, lines 33-34]*.

8-15. Regarding claim 18, Graham '492 and Graham '795 teach the claim with respect to claim 16, wherein each of the one or more display criteria is associated with one or

more of the location criteria, by disclosing that the annotation contour represents

locations with the document *[Graham '492, column 4, lines 32-43]*.

8-16. Regarding claim 19, Graham '492 and Graham '795 teach the claim with respect

to claim 18, further comprising obtaining one or more user-defined display criteria, by

disclosing a sensitivity control that allows the user to select the degree of sensitivity to

apply in identifying potential locations of relevant discussion *[Graham '492, column 6,*

lines 50-64].

8-17. Regarding claim 20, Graham '492 and Graham '795 teach the claim with respect

to claim 19, further comprising obtaining one or more user defined location criteria, by

disclosing receiving user input indicating user-specified concepts of interest *[Graham*

'492, column 7, lines 33-34].

8-18. Regarding claim 21, Graham '492 and Graham '795 teach the claim with respect

to claim 1, further comprising obtaining one or more user-defined display criteria, by

disclosing a sensitivity control that allows the user to select the degree of sensitivity to

apply in identifying potential locations of relevant discussion *[Graham '492, column 6,*

lines 50-64].

8-19. Regarding claim 22, Graham '492 and Graham '795 teach the claim with respect

to claim 21, wherein each of the one or more display criteria is associated with one or

more of the location criteria, by disclosing that the annotation contour represents

locations with the document *[Graham '492, column 4, lines 32-43]*.

8-20.   Regarding claim 23, Graham '492 and Graham '795 teach the claim with respect

to claim 1, wherein each of the one or more display criteria is associated with one or

more of the location criteria, by disclosing that the annotation contour represents

locations with the document *[Graham '492, column 4, lines 32-43]*.

8-21.   Regarding claim 26, Graham '492 and Graham '795 teach the claim with respect

to claim 5, wherein the background display criteria includes at least one of color, hue,

intensity, and transparency, by disclosing *[Graham '492, figure 1A]*.

8-22.   Regarding claim 27, Graham '492 and Graham '795 teach the claim as recited in

claim 1, wherein locating one or more desired locations in the file according to the

location criteria comprises determining a reference count for each row in the file, the

reference count indicating a number of the desired locations in the corresponding row,

by disclosing that ranges may be created and displayed based on the searched word

[Graham '795, column 44, line 20 to column 45, line 5]. Since users may specify and

edit ranges *[Graham '795, column 42, lines 38-60]*, each range may correspond to a

row of text. Ranges in a set of ranges may be ranked or sorted according to a user-

configurable criteria such as relevance based on hits *[Graham '795, column 58, lines*

19-27].

8-23. Regarding claim 28, Graham '492 and Graham '795 teach the claim with respect to claim 27, wherein displaying the scroll bar by applying the one or more display criteria to one or more locations of the scroll bar corresponding to the one or more desired locations in the file comprises applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the reference count for corresponding rows in the file, by disclosing using the technique of Graham '795 *[Graham '795, column 58, lines 19-27]* as the technique for analyzing the document to determine locations of user-specified concept of interest of Graham '492 *[Graham '492, column 2, lines 10-19]*. A graphical representation of the analysis will be displayed *[Graham '492, column 2, lines 25-32]*.

8-24. Regarding claim 29, Graham '492 and Graham '795 teach the claim with respect to claim 28, further comprising displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the reference count for corresponding rows in the file, by disclosing that the annotation contour represents locations with the document *[Graham '492, column 4, lines 32-43]*.

8-25. Regarding claim 38, Graham '492 and Graham '795 teach the claim with respect to claim 1, further comprising receiving a selection of a location of the scroll bar after the

scroll bar is displayed, by disclosing that a sliding window may be repositioned along

the annotation contour *[Graham '492, column 7, lines 12-16]*.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 24 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over

Graham (U.S. Patent No. 7,228,492 B1), in view of Graham et al (U.S. Patent No.

7,495,795 B2), and further in view of Eick (U.S. Patent No. 5,644,692).

Claims 24, 25

10-1.   Regarding claim 24, Graham '492 and Graham '795 teach the claim as recited in

claim 5. Graham '492 and Graham '795 do not expressly teach the claim further

comprising obtaining user-defined background display criteria. Eick discloses a scroll

bar with markers indicating specific details of a document *[column 23, line 22 to column

24, line 14]*. Various types of attributes are associated with each line within a document

by using a set of colors on the scroll bar *[column 27, lines 46-62]*. Conditional displays

of an attribute are set up by specifying a foreground and background attribute type for

the scroll bar *[column 28, lines 12-19, 36-44]*. This provides further information to a user

regarding which portions of a document are related to a plurality of attribute values

[column 2, lines 18-27]. Since Graham '492 and Graham '795 teach a scroll bar for

displaying relevant information about a document *[Graham '492, figure 5]*, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to

include user-defined foreground and background display criteria for displaying portions

of the scroll bar containing certain attributes, as taught by Eick. This provides further

information to a user regarding which portions of a document are related to a plurality of

attribute values.

10-2.   Regarding claim 25, Graham '492, Graham '795, and Eick teach the claim with

respect to claim 24, wherein the background display criteria includes at least one of

color, hue, intensity, and transparency because the default background for the scroll bar

must have some sort of color. Additionally, markers indicating the attributes include

lines of a different color or a color of the scroll bar *[Eick, column 24, lines 1-14]*.

11.   Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Graham (U.S. Patent No. 7,228,492 B1), in view of Graham et al (U.S. Patent No.

7,495,795 B2), and further in view of Mohan et al (U.S. Patent No. 6,970,881 B1).

Claims 30, 31

11-1.   Regarding claim 30, Graham '492 and Graham '795 teach the claim with respect

to claim 28. Graham '492 and Graham '795 do not expressly teach the claim further

comprising dividing the reference count for each row in the file by a total number of

reference counts in the file to obtain a row reference count, normalizing the row

reference count for each row in the file, and wherein applying the one or more display

criteria to the one or more locations of the scroll bar includes applying the one or more

display criteria to the one or more locations of the scroll bar in accordance with the

normalized row reference count for corresponding rows in the file. Mohan discloses

categorizing and analyzing unstructured information such as documents *[column 1,*

lines 27-60; column 3, lines 10-25] in order to provide an intelligent view of the

unstructured information *[column 18, lines 5-12]*. Scores for individual key concepts that

contributed to a search are averaged for each object returned. If the search was

performed using a combination of key concepts and seed concepts, the number of hits

for the seed concepts are divided by the total number of hits picked up for all seed

concepts in the document to determine how much the seed concept actually contributed

to the concept of the document. This is used to obtain a relevancy score for the object

as it pertains to a particular search *[column 18, lines 33-45]*. Scores are normalized as

discussed in *[column 16, line 30 to column 17, line 15]*. Since Graham '492 and Graham

'795 disclose classifying range of text based on the number of hits within it *[Graham*

'795, column 58, lines 19-27] and displaying an annotation contour on a scroll bar

[Graham '492, figure 5] based on a relevancy classification *[Graham '492, column 2,*

lines 8-19], it would have been obvious to one of ordinary skill in the art at the time the

invention was made, to use the method of determining a relevancy score, as taught by

Mohan, on each row in the document. This would enable the user to view trends within each row of the document.

11-2.   Regarding claim 31, Graham '492, Graham '795, and Mohan teach the claim with respect to claim 30, further comprising displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the normalized row reference count for corresponding rows in the file, by disclosing using a technique for analyzing the document to determine locations of user-specified concept of interest *[Graham '492, column 2, lines 10-19]* for the graphical representation *[Graham '492, column 2, lines 25-27]*. Since the relevance is determined by the method as taught by Mohan, the attribute would be displayed based on the normalized row reference count for corresponding rows.

12.   Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham (U.S. Patent No. 7,228,492 B1), in view of Graham et al (U.S. Patent No. 7,495,795 B2) and Mohan et al (U.S. Patent No. 6,970,881 B1), and further in view of Kline ("Principles and Practice of Structural Equation Modeling", December 2002).

Claims 32-34

12-1.   Regarding claim 32, Graham '492, Graham '795, and Mohan teach the claim as recited in claim 30. Graham '492, Graham '795, and Mohan do not expressly teach the

claim further comprising applying a non-linear function to each normalized row

reference count to generate a non-linear normalized row reference count for each row in

the file wherein applying the one or more display criteria to the one or more locations of

the scroll bar includes applying the one or more display criteria to the one or more

locations of the scroll bar in accordance with the non-linear normalized row reference

count for corresponding rows in the file. Kline discloses correcting a positive and

negative skew in data by applying a non-linear function to the data *[page 23, number 5;*

page 24, number 6]. Preventing a positive and negative skew in a data set of row

scores would provide a more even distribution of row scores across the whole

document and thus, allow the even distribution of colors to represent scores on the

scroll bar. Since Graham '492, Graham '795, and Mohan disclose determining the

relevance of rows within a document and displaying a graphical representation on a

scroll bar based on a classification *[Graham '492, column 2, lines 25-27; figure 5]*, it

would have been obvious to one of ordinary skill in the art at the time the invention was

made, to apply a non-linear function to each normalized row reference count as taught

by Kline. This would provide a more even distribution of row scores across the whole

document and thus, allow an even distribution to represent scores on the scroll bar.

12-2.   Regarding claim 33, Graham '492, Graham '795, Mohan, and Kline teach the

claim with respect to claim 32, further comprising displaying one or more of the plurality

of locations in the file by applying the one or more display criteria to the one or more of

the plurality of locations in the file in accordance with the non-linear normalized row

reference count for corresponding rows in the file, by disclosing using a technique for

analyzing the document to determine locations of user-specified concept of interest

[Graham '492, column 2, lines 10-19] for the graphical representation *[Graham '492,*

column 2, lines 25-27]. Since the relevance is determined as taught above, the attribute

would be displayed based on the non-linear normalized row reference count for

corresponding rows.

12-3.   Regarding claim 34, Graham '492, Graham '795, Mohan, and Kline teach the

claim with respect to claim 32, wherein the non-linear function is a square-root function

[Kline, page 23, number 5].

Response to Arguments

13.   The Examiner acknowledges the Applicant's amendments to claims 1 and 35-37

and the cancellation of claim 3. Regarding independent claims 1 and 35-37, the

Applicant alleges that Graham (U.S. Patent No. 7,228,492 B1), as described in the

previous Office action, does not explicitly teach a scroll bar with a plurality of locations

of the scroll bar indicating the relative importance of locations of a file within the context

of the claimed invention. Contrary to Applicant's arguments, Graham '492 discloses

displaying an annotation contour 520 along an elongated thumbnail image 514 of the

document *[Graham '492, column 7, lines 7-11; figure 5]*. The annotation contour 514

including a sliding window 524 may be considered a scroll bar since sliding window 524

corresponds to the current location of text displayed in section 502 and because the

sliding window may be repositioned by the user *[Graham '492, column 6, line 65 to column 7, line 15]*.

Applicant alleges that Graham '492 does not explicitly teach the scroll bar includes a plurality of horizontal segments indicating the relative importance of content of a file. However, after further consideration, Examiner believes Graham '492 does disclose this limitation. Although *[Graham '492, figure 5]* depicts the annotation contour on a horizontal scroll bar, *[Graham '492, column 9, line 60 to column 10, line 3]* clearly states that the visual indicator (i.e. the annotation contour) may be displayed on either axis. This, taken in conjunction with *[Graham '492, figures 7A-D]* which shows a thumbnail representation of the document displayed vertically, suggests that one could easily depict the annotation contour along the vertically displayed thumbnail image of *[Graham '492, figures 7A-D]*. In fact, one would only need to switch the x and y coordinates of the annotation contour displayed in *[Graham '492, figure 5]* in order to do so. If the annotation contour of *[Graham '492, figure 5]* were displayed vertically using a bar chart *[Graham '492, column 4, lines 24-32]*, horizontal segments would indicate the relative importance of the contents.

Applicant alleges that Graham '492 does not explicitly teach displaying a plurality of horizontal segments of a vertical scroll bar, at least partially based on one or more granulate objects respectively representative of one or more rows of displayed content, wherein each granulate object stores at least (a) a reference count indicative of the relative importance of its respective row and (b) text of its respective row. Examiner has therefore rejected independent claim 1 under 35 U.S.C. 103(a) as being unpatentable

over Graham '492 in view of Graham et al (U.S. Patent No. 7,495,795 B2). Applicant's

arguments have been considered but are moot in view of the new grounds of rejection.

Independent claims 35-37 have been similarly amended and thus, claims 35-37

are rejected for the same reasons.

Applicant states that dependent claims 4-34 and 38 recite all the limitations of the

independent claims, and thus, are allowable in view of the remarks set forth regarding

independent claim 1. However, as discussed above, Graham '492, in view of Graham

'795, is considered to teach claim 1, and consequently, claims 4-34 and 38 are rejected.

Conclusion

14.   The prior art made of record on attached form PTO-892 and not relied upon is

considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R §

111(c) to consider these references fully when responding to this action. The

documents cited therein teach similar systems for displaying relative emphasis in a file.

15.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ALVIN H. TAN whose telephone number is (571)272-

8595. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kieu Vu can be reached on 571-272-4057. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alvin H Tan/
Examiner, Art Unit 2173